

Notice of Allowability	Application No.	Applicant(s)
	09/911,272	GOGOLLA ET AL.
	Examiner Benny Q. Tieu	Art Unit 2642

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTO-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- This communication is responsive to patent application filed July 23, 2001.
- The allowed claim(s) is/are 1-20.
- The drawings filed on 23 July 2001 are accepted by the Examiner.
- Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - All
 - Some*
 - None
 of the:
 - Certified copies of the priority documents have been received.
 - Certified copies of the priority documents have been received in Application No. _____.
 - Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - hereto or 2) to Paper No./Mail Date _____.
 - including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
- DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- Notice of References Cited (PTO-892)
- Notice of Draftsperson's Patent Drawing Review (PTO-948)
- Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 8/20/02
- Examiner's Comment Regarding Requirement for Deposit
of Biological Material
- Notice of Informal Patent Application (PTO-152)
- Interview Summary (PTO-413),
Paper No./Mail Date _____.
- Examiner's Amendment/Comment
- Examiner's Statement of Reasons for Allowance
- Other _____.

Reasons for Allowance

1. The following is an examiner's statement of reasons for allowance: Iwaoka et al. (U.S. Patent No. 4,856,899) teach an optical frequency analyzer for measuring an optical frequency spectrum with high accuracy, high resolving power and high stability by heterodyne detecting the incident light with the aid of a local oscillator, wherein the local oscillator comprises an optical frequency synthesizer/sweeper or a marker signal attached tunable laser. The optical frequency analyzer can be modified to measure the incident light itself as the object of measurement or light emerging from the object of measurement can be the incident light (Abstract). Hug (U.S. Patent No. 5,180,922) teaches a distance measuring apparatus has a photoelectric light transmitter and a photoelectric light receiver which alternately direct light via a measurement path and a reference path to a single photoreceiver. The distance from a target is determined by measurement of the transit time differences via the measurement path, on the one hand, and via the reference path, on the other hand. The light transmitter contains two laser diodes which can be electronically switched in a complementary manner of which the one sends the light trains to the measurement path and the other sends light trains to the reference path. Both light wave trains are alternately received by the same photoreceiver which is connected to an electronic processing circuit (column 3, line 44 through column 4, line 40). Reifer (U.S. Patent No. 5,742,379) teaches a device and method of electronically obtaining range or distances from the device to the target utilizing a central processing unit (CPU) in combination with a pulse repetition frequency generator, a plurality of photodetectors and a transistor to transistor clock counter, in a lightweight and portable configuration. The device obtains a plurality of samples, which enables the CPU to determine filter delay, range resolution and count deviations

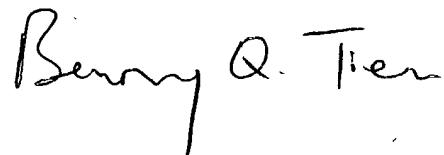
so as to accurately determine range or distance measurement to within plus or minus one centimeter (Fig. 1). However, prior art of record fails to teach, or renders obvious, alone or in combination, a local oscillator for generating a narrow-band HF signal for direct mixing with a reception signal generated by a reverse-biased avalanche photodiode (APD 2) from a light signal impinging on the latter, wherein a depletion layer capacitance (C_{APD}) of the avalanche photodiode (APD 2) is incorporated in a controllable HF resonant circuit whose circuit whose resonant frequency forming the HF signal is determined by selective adjustments of a control unit which is acted upon by a reference oscillator (6).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benny Q. Tieu whose telephone number is (703) 305-2360. The examiner can normally be reached on Monday-Friday: 6:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad Matar can be reached on (703) 305-4731. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**BENNY TIEU
PRIMARY EXAMINER**

Art Unit 2642
October 30, 2004